



Residential Furnace Installation Check List

Installation Company _____

Company Address _____

City	State	ZIP + 4-digits	Phone
Date Installed (mm/dd/ccyy)	Installer		
Heating Manufacturer	Model		
Fuel Type	Efficiency Rating (AFUE)		

Please complete the following heating system and efficiency procedures section. Any items checked **No** must have an explanation of why the procedure was not performed.

Does Not Apply			Procedure	Does Not Apply			Procedure
Yes	No	Apply		Yes	No	Apply	
			System Sizing (ATTACH CALCULATION)				Efficiency Checks
<input type="radio"/>	<input type="radio"/>		Heat Loss Calculations				_____ Metered SSE
			Safety Equipment Check				_____ Measured Smoke
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	High Temperature Shutoff	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Flame Adjusted
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Shutoff Temp. _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Temperature Rise _____
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Vent Pressure Shutoff (Gas)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ductwork Checked For Leaks
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Electric Shutoff Switch	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Ductwork Checked For Balance
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Carbon Monoxide Measured (Gas)				Exhaust Gas Venting
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fuel Leak Check	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Vented Through The Wall
			Thermostat Check	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Proper PVC Support
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Accuracy of Thermostat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Door/Window Clearance Acceptable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Anticipator Set at _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Clearances Acceptable
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Amp. Draw at Thermostat _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Vent Termination Kit Installed
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Thermostat Leveled				Vented Through Chimney
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Thermostat Replaced	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Proper Slope
			Model _____	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Type of Chimney _____
			System Setup	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Chimney Meets Manufac. Specs.
			_____ Metered Gas Input				Owner Services
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Condensate Drain Installed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Operation Manual Provided
			_____ Measured Pump Pressure	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Maintenance Procedures Explained
			_____ Nozzle Size	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Air Filter
			_____ Firing Rate	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Tune-up Period
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Heating Unit Leveled	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Warranty Explained
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Fuel Filter Replaced				
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Filters installed				

Installer Certification: The information provided above and attached is accurate and has been provided to the resident.

Resident Certification: The heating system described above has been installed and I have received information on the system's operation and maintenance.

Installer Signature _____

Date (mm/dd/ccyy) _____

Resident's Signature _____

Date (mm/dd/ccyy) _____

Checklist Instructions

Sizing:

A manual J, computerized heat loss program, manufacturer sizing worksheet or other calculations used for sizing the replacement heating system must be attached to this form. Only the copy of this form, which is submitted to the funding source need have the calculations attached.

Safety:

1. With the blower disconnected a temperature probe should be used in the plenum to determine the high limit shutoff.
2. On power vented units, vents should be obstructed to test the safety shutoff.
3. All units must be installed with an electric shutoff switch at the unit.
4. Gas units must be tested for carbon monoxide in the flue. A reading of 50 ppm or less in the flue is required.
5. All fuel lines from house entry to the unit must be tested for gas leaks.

Thermostat:

1. Using a thermometer other than one incorporated into the thermostat, the thermostat must be checked for accuracy.
2. Record the heat anticipator setting.
3. Record the amp draw as metered at the thermostat.
4. For mercury switch thermostats, level the thermostat.
5. If the thermostat is replaced, identify the model number.

Setup For Gas Units:

1. Record the metered gas input for natural gas units. Below is the metering procedure.
 - A. Turn off all other gas appliances and pilots.
 - B. Measure time (in seconds) for gas meter test dial to complete one revolution.
 - C. Refer to Table 2 for cu ft of gas per hour.

Gas Rate (Cubic Feet Per Hour)

Seconds For One Revolution	Size of Test Dial			Seconds For One Revolution	Size of Test Dial		
	1 cu ft	2 cu ft	5 cu ft		1 cu ft	2 cu ft	5 cu ft
10	360	720	1800	50	72	144	360
11	327	655	1636	51	71	141	355
12	300	600	1500	52	69	138	346
13	277	555	1385	53	68	136	340
14	257	514	1286	54	67	133	333
15	240	480	1200	55	65	131	327
16	225	450	1125	56	64	129	321
17	212	424	1059	57	63	125	316
18	200	400	1000	58	62	124	310
19	189	379	947	59	61	122	305
20	180	360	900	60	60	120	300
21	171	343	857	62	58	116	290
22	164	327	818	64	56	112	281
23	157	313	783	66	54	109	273
24	150	300	730	68	53	106	265
25	144	288	720	70	51	103	257
26	138	277	692	72	50	100	250
27	133	267	667	74	48	97	243
28	129	257	643	76	47	95	237
29	124	148	621	78	46	92	231
30	120	240	600	80	45	90	225
31	116	232	581	82	44	88	220
32	113	225	563	84	43	86	214
33	109	218	545	86	42	84	209
34	106	212	529	88	41	82	205
35	103	206	514	90	40	80	200
36	100	200	500	92	39	78	196
37	97	195	486	94	38	76	192
38	95	189	474	96	37	74	188
39	92	185	462	98	36	72	184
40	90	180	450	100	35	70	180
41	88	176	439	102	34	68	178
42	86	172	429	104	33	66	173
43	84	167	419	106	32	64	170
44	82	164	409	108	31	62	167
45	80	160	400	110	30	60	164
46	78	157	391	112	29	58	161
47	76	153	383	114	28	56	158
48	75	150	375	116	27	54	155
49	73	147	367	118	26	52	152

- D. Multiply cu ft per hour times heating value of gas (Btu/cu ft). Obtain heating value of gas from local gas utility.

Example:

Btu heating input = Btu/cu ft x cu ft/hr

Heat value of gas = 1070 Btu/cu ft

Time for one revolution of 2 cu ft dial = 72 seconds

Gas rate = 100 cu ft/hr (from Table 2)

Btu heating input = 1070 x 100 = 107,000 Btu

- E. Measured gas input should not exceed gas input shown on unit rating plate.

2. The heating unit must be leveled.
3. For condensing units a drain must be installed meeting local codes.
4. Gas pressure at the unit must be measured, and within manufacturer specifications.

Setup for Oil Units:

1. Record the metered pump pressure.
2. Enter the nozzle size.
3. Enter the actual firing rate based on pump pressure and nozzle size.

Efficiency:

1. Enter the final metered Steady Rate Efficiency. Set the air/fuel ratio to provide maximum efficiency.
2. Set the air/fuel ratio in oil units to provide maximum efficiency with acceptable smoke (0 or 1 smoke).
3. Using temperature probes located in the return drop and one at least 12" above the heat exchanger in the plenum, record the air temperature rise. Verify that it is within the manufacturer's acceptable range.
4. Check ductwork both supply and return for leaks. Tape or connect as needed.
5. Inspect supply dampers and inspect ducts for obstructions or excessive dirt. Talk with resident to identify cold rooms. Adjust dampers if present.

Exhaust:

Sidewall Vented: Inspect venting to ensure that pipe support meets manufacturer's specification. Vent terminations must meet manufacturer's specifications and local code. If a manufacturer supplied termination kit is required it must be installed.

Vented Through Chimney: Indicate the type of chimney the unit is vented to (ex. exterior masonry, class A metal). Indicate that the chimney meets the manufacturer's specifications, including that no solid fuel appliance is vented to the same flue.

Owner Services:

1. Provide the owner's manual to the resident.
2. Explain the proper maintenance procedures to the resident including air and fuel filter replacement, tune-up periods and other regular recommended maintenance.
3. Explain the warranty period, covered warranty items and warranty service procedure.

Miscellaneous:

1. AFUE ratings must be obtained from the most recent version of the GAMA Ratings (April or October edition).
2. One copy of this form must be provided to the property owner. One copy including the sizing calculations must be provided to the State of Wisconsin agency or contractor providing funds.
3. This form is provided by the Division of Energy. If you have questions on the form, call your local program contact or the Energy Services Bureau at (608) 267-3680.